 **UNIVERSITY OF MAINE AT FARMINGTON**

**COLLEGE OF EDUCATION, HEALTH AND REHABILITATION**

**LESSON PLAN FORMAT**

**Teacher’s Name:** Ms. Jones  **Lesson #: 1 Facet:** Explain

**Grade Level:** 9-diploma  **Numbers of Days: 3**

**Topic:**  How physical activity effects the body.

**PART I:**

**Objectives**

Student will understand that physical activity effects all aspects of health

Student will know key factual Information about how physical activity effects the body.

Student will be able to describe the effects that physical activity does the body.

**Product:** Prezi

**Maine Learning Results (MLR) or Common Core State Standards (CCSS) Alignment**

**Maine Learning Results**

**Content Area:** Health Education and Physical Education

**Standard Label:** H. Physical Fitness Activities and Knowledge

**Standard:** H4 Physical Activity Benefits

**Grade Level Span:** Grades 9 - Diploma

Students explain the interrelationship of physiological responses and physical, mental/intellectual, emotional, and social benefits related to regulate participation in physical activity.

**Rationale:** Students will be able to realize how important physical activity is to the body. They will understand without physical activity many of your body functions do not work in ways they were meant to.

**Assessments**

**Pre-Assessment:**

Google survey: Teacher will provide questions for students to answer and have them show up on the overhead so we can discuss the ideas as a class to try and get them excited about the unit**.**

**Formative (Assessment for Learning)**

**Section I – checking for understanding during instruction**

Students will be responsible for giving the teacher an outline of their proposed projects. Teacher will be able to make comments and steer students into right direction.

**Section II – timely feedback for products (self, peer, teacher)**

Students will receive rubrics for both the group and individually to complete.

**Summative (Assessment of Learning):**

Students will use their cubes with teacher feedback on them to create a presentation individual to the teams. Students will be using Prezi. Students will be put into groups in which they will have a topic. The topics that will be available are: Heart, Brain, Muscles, Lungs, Skin. Students will explore the different complications related to their area in the case of limited physical activity, and also the advantages that physical activity will have on that certain area. Students will be given a rubric so that they will be able to self asses, and to know exactly what is expected.

**Integration**

**Technology:** Students will be making a cube through cube creator that will let them be able to be as creative as they want but also to be highlighting the importance of physical activity. Students will be using Prezi.

Students will also be exploring the web searching for any supplemental information for their Prezi’s.

**Content Areas:** Anatomy & Physiology- By analyzing why different organs/muscles function the way they do, and what happens when something goes wrong students will be studying the physiology of it.

**Groupings**

**Section I - Graphic Organizer & Cooperative Learning used during instruction**

Students will use Cube creator to show what they have learned about the effects of what physical activity can do to one’s body, they will be sharing their cube with their classmates and which will give the students the ability to highlight the things that stood out to them, and to see what other kids were interested in as well.

**Section II – Groups and Roles for Product**

Students will be broken into 5 groups based on their interests and teachers digression. Students will communicate with their team members and the teacher on which role each of them will take. Different Roles: Designer, Information Guru, Organization Guru

**Differentiated Instruction**

**MI Strategies**

* **Logical:** Students will be able to understand the logic behind the benefits of physical activity.
* **Verbal:** Students will be able to share their understandings when presenting their cubes to one another, and also when they present their projects they will be able to again verbalize their understanding of the content.
* **Visual:**  The hook will engage these learners because they will be able to see pictures of different people with different activity levels. They will also be engaged when the others students are presenting their projects.
* **Musical:** Differences over time in the perception of what is healthy/pretty. When showing the difference over time, bring in music from the genres to put them in that era.
* **Intrapersonal:** Students will be able to individualize their cubes and therefore be able to internalize their own thoughts.
* **Interpersonal:** Students will be able to share with their peers the cube that they created to allow students to bounce ideas off of each other regarding and to work as a team
* **Kinesthetic:** Teacher will bring in models of fat cells and muscle cells and have them get into groups and explore the difference between the two.
* **Naturalist:** With bringing in the different music from a certain era, I will also show on slides what the people in that era ate and how they had to access their food.

**Modifications/Accommodations**

***From IEP’s (Individual Education Plan), 504’s, ELLIDEP (English Language Learning Instructional Delivery Education Plan)***

*I will review student’s IEP, 504 or ELLIDEP and make appropriate modifications and accommodations.*

**Plan for accommodating absent students:**

Students will be able to access the information presented through the class wiki and be able to work on the work where ever they may be.

**Extensions**

**Type II technology:**

Cube creator

Prezi

**Gifted Students:**Gifted students will be held to a higher standard when it comes to the Prezi and also their cubes. The hope is that they will be able to be a resource for their other classmates.

**Materials, Resources and Technology**

*Handouts*

*Computer-with PowerPoint and Google survey easily accessible.*

**Source for Lesson Plan and Research**

<http://www.fitsugar.com/Hormones-Released-After-Working-Out-19252431> - Information on what hormones and chemicals are released during exercise.

<http://www.fi.edu/learn/brain/exercise.html> -this is an informational cite about how physical activity effects the brain.

<http://fitness.gov/>-this cite offers a broad range of information and activities related to physical activity and the ways to be an active and healthy individual.

[http://www.umm.edu/patiented/articles/what\_effects\_of\_exercise\_on\_heart\_circulation\_000029\_3.htm%20http://www.umm.edu/patiented/articles/what\_effects\_of\_exercise\_on\_heart\_circulation\_000029\_3.htm%20](http://www.umm.edu/patiented/articles/what_effects_of_exercise_on_heart_circulation_000029_3.htm%20)-this is all about the heart and the effects of physical activity.

<http://www.umm.edu/patiented/articles/what_effects_on_muscles_bones_joints_000029_5.htm> -this is all of the bones/muscles and the effects of physical activity.

<http://www.umm.edu/patiented/articles/what_effects_does_exercise_have_on_other_conditions_000029_8.htm> -this page is about how being physical activity can help a number of different symptoms including: emotional disorders, pregnancy and many more.

<http://www.readwritethink.org/classroom-resources/student-interactives/cube-creator-30850.html> Cube Creator

**PART II:**

**Teaching and Learning Sequence (Describe the teaching and learning process using all of the information from part I of the lesson plan)** *Take all the components and synthesize into a script of what you are doing as the teacher and what the learners are doing throughout the lesson. Need to use all the WHERETO’s. (3-5 pages)*

Agenda:

Day 1

* Attendance: 5 minutes
* Name Game: 10 minutes
* Syllabus and introduction to wikispace: 20 minutes
* Pre-assessment: 10 minutes
* Hook(fat cells/ muscle cells) (examples of poor physical activity) : 5 minutes
* Explain Cube Creator: 5 minutes
* Start Power point: 10 minutes
* Explanation of project and grouping students 15 minutes

Day 2

* Attendance: 2 minutes
* Samples of what pretty has evolved into over time: 10 minutes
* Finish PowerPoint: 30 minutes
* Working in groups for project: 25 minutes
* Questions on projects and order of presentations: 13 minutes

Day 3

* Attendence: 2 minutes
* Presentation of Projects: 5 groups at 5-10 minutes a piece
* End class with feedback from students on how to better reach them in the classroom

Classroom Arrangement: Tables of 4-5 students.

Students will understand that physical activity affects all aspects of health. Students will be able to understand the reason why it is so important to be physically active. *Students explain the interrelationship of physiological responses and physical, mental/intellectual, emotional, and social benefits related to regulate participation in physical activity.* For a pre-assessment students will be asked to complete a Google survey. Teacher will provide questions for students to answer and have them show up on the overhead so we can discuss the ideas as a class to try and get them excited about the unit**.** For a hook the teacher will show a power point that highlights the effects of poor physical activity. Students will be asked to share their thoughts about what they see.

**Where, Why, What, Hook, Tailor:** **Visual, Interpersonal, Kinesthetic, Verbal**

Students will know key factual Information about what physical activity is and the effects of the lack of physical activity to their bodies. (See Content Notes) Teacher will be presenting a PowerPoint that she has created on a brief summary of the 5 major organs/arteries and also interesting fact about others. I am using the cube creator graphic organizer so that students can see if they truly understand the effects that physical activity can have. I will used the Jigsaw cooperative learning strategy to have the kids find out if what they think the same as their peers. Students will be able to rethink their information as they are getting reading to present their material. Students will be responsible for all material that is presented. Students have time to meet with the teacher as she is going around and looking at students cubes in which they created.

**Equip, Explore, Rethink, Tailors: Interpersonal, Verbal, Kinesthetic, Visual, Logical**

Students will be able to describe the effects that physical activity does the body. Students will be able to explore at least one of the five major organs/muscles. The other four will be presented to them, in which they are required to take good notes and know those as well. Students will be broken into 5 groups based on their interests and teachers digression. Students will communicate with their team members and the teacher on which role each of them will take. Different Roles: Designer, Information Guru, Organization Guru. Self-assessment will be expected when presenting. Students will be given a worksheet to see what each of the other students did. Students will be expected to complete the cube creator and also contribute to final project. By having students share what their peers did to enhance project, teacher will be able to see if some students deserve a couple extra points. Students will be expected to be active in group discussions.

**Explore, Experience, Rethink, Revise, Refine, Tailors: Logical, Interpersonal, Intrapersonal, Visual**

Students will be given rubrics in which they will be assessing, themselves, their groups and also other groups that present. Teacher will have different rubrics for each. Students will be able to evaluate themselves and their project before presenting, which will hopefully prove to better their grades. Students will be able to receive feedback from me when teacher is looking at all of the cubes. With the background knowledge found in this lesson students will be able to use this in future projects and understandings.

**Evaluate, Tailors: Visual, Interpersonal, Verbal, Logical,**

**Content Notes**

Students will know key information about the body and how physical activity effects it.

* Muscles: Muscle inflexibility can restrict the back's ability to move, rotate, and bend. Weak stomach muscles can increase the strain on the back and can cause an abnormal tilt of the pelvis (hip bones).Weak back muscles may increase the load on the spine and the risk of disk compression. Obesity puts more weight on the spine and increases pressure on the vertebrae and disks. Studies report only a weak association between obesity and low back pain, however. Like all muscles, the heart becomes stronger as a result of exercise, so it can pump more blood through the body with every beat and continue working at maximum level, if needed, with less strain. The resting heart rate of those who exercise is also slower, because less effort is needed to pump blood. A person who exercises often and vigorously has the lowest risk for heart disease, but any amount of exercise is beneficial. Studies consistently find that light-to-moderate exercise is even beneficial in people with existing heart disease. Note, however, that anyone with heart disease or cardiac risk factors should seek medical advice before beginning a workout program.
* Brain: Physical activity has been proven to treat depression and also improve memory. While you perform physical activity the brain releases neurotransmitters that alleviate pain, both physical and mental. Different hormones released are: Endorphins-make you feel exhilarated and happy and block feelings of pain. Estrogen-women tend to burn fat for fuel while men seems to burn carbs for fuel. Serotonin- the chemical responsible for the feeling of happiness, it also is responsible for helping the process of restful sleep.
* Heart: Inactivity is one of the major risk factors for heart disease. However, exercise helps improve heart health, and can even reverse some heart disease risk factors. Like all muscles, the heart becomes stronger as a result of exercise, so it can pump more blood through the body with every beat and continue working at maximum level, if needed, with less strain. The resting heart rate of those who exercise is also slower, because less effort is needed to pump blood. A person who exercises often and vigorously has the lowest risk for heart disease, but any amount of exercise is beneficial. Studies consistently find that light-to-moderate exercise is even beneficial in people with existing heart disease. Note, however, that anyone with heart disease or cardiac risk factors should seek medical advice before beginning a workout program. The heart is a large muscular organ that pumps blood throughout the body. Valves inside the heart open and close. This controls how much blood enters or leaves the heart.

**Handouts**

Cube Creator

Rubric

Circle Triangle Square

Syllabus

**Maine Common Core Teaching Standards for Initial Teacher Certification and Rationale**

***Standard 1 – Learner Development. The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.***

***Learning Styles***

***Clipboard:*** Students with this learning style will be able be organized with the syllabus and also be able to access the class wikispace. The wikispace will be a place where students can review the material covered in that days lesson and also be able to access all the resources that were discuss.

***Microscope:*** Students will be able to explore deeper thinking when their researching for their Prezi presentations.

***Puppy:*** Students will this learning style will feel safe and non-stressed because they will be able to take on a role that fits them.

***Beach Ball:*** Students with this learning style will be as creative as they wish. They will also be able to bounce ideas off of each other throughout the lesson.

***Rationale:*** Students with these learning styles will be honored and respected because there are many activities throughout the lessons where they can shine.

***Standard 6 -* *Assessment. The teacher understands and uses multiple methods of assessment to engage learners in their on growth, to monitor learner progress, and to guide the teacher's and learner's decision making.***

***Formative:*** Students will be responsible for giving the teacher an outline of their proposed projects. Teacher will be able to make comments and steer students into right direction. Students will receive rubrics for both the group and individually to complete.

***Summative:*** Students will use their cubes with teacher feedback on them to create a presentation of their choosing. Students will be using Prezi. Students will be put into groups in which they will have a topic. The topics that will be available are: Heart, Brain, Muscles, Lungs, Skin. Students will explore the different complications related to their area in the case of limited physical activity, and also the advantages that physical activity will have on that certain area.

***Rationale:*** Students will be able to know exactly what is expected of them from the beginning. Students will hopefully feel as though they can control their learning.

***Standard 7* - *Planning Instruction. The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.***

***Content Knowledge:*** Student will know key factual Information about how physical activity effects the body. Student will be able to describe the effects that physical activity does the body.

***MLR or CCSS:***

**Maine Learning Results**

**Content Area:** Health Education and Physical Education

**Standard Label:** H. Physical Fitness Activities and Knowledge

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Students explain the interrelationship of physiological responses and physical, mental/intellectual, emotional, and social benefits related to regulate participation in physical activity.

***Facet:*** Explain

***Standard 8 -* *Instructional Strategies. The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.***

***MI Strategies:***

* **Logical:** Students will be able to understand the logic behind the benefits of physical activity.
* **Verbal:** Students will be able to share their understandings when presenting their cubes to one another, and also when they present their projects they will be able to again verbalize their understanding of the content.
* **Visual:**  The hook will engage these learners because they will be able to see pictures of different people with different activity levels. They will also be engaged when the others students are presenting their projects.
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***Type II Technology:*** Students will be making *Prezi’s* within their groups.

***Rationale:*** Students will be able to be very creative when making their project. Students with different M.I’s will be able to make their Prezi projects diverse and enriched.

***NETS STANDARDS FOR TEACHERS***

**1. Facilitates and Inspire Student Learning and Creativity. Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.**

a. Promote, support, and model creative and innovative thinking and inventiveness

b. Engage students in exploring real-world issues and solving authentic problems using digital tools and resources

c. Promote student reflection using collaborative tools to reveal and clarify students’ conceptual understanding and thinking, planning, and creative processes

d. Model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments

***Rationale:*** Students will be able to relate this lesson to the real world because your body is either going downhill due to inactivity or uphill due to some.

**2. Design and Develop Digital Age Learning Experiences and Assessments. Teachers design, develop, and evaluate authentic learning experiences and assessment incorporating contemporary tools and resources to maximize content learning in context and to develop knowledge, skills, and attitudes identified in the NETS-S.**

a. Design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity

b. Develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress

c. Customize and personalize learning activities to address students’ diverse learning styles, working strategies, and abilities using digital tools and resources

d. Provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching

***Rationale:*** Students will be able to customize their Prezi’s to promote learning and creativity, with using the Prezi as their summative assessment the teacher will be able to not only assess their learning but get a feel of their different M.I’s.